# BAB V
# KESIMPULAN DAN SARAN

## 5.1. Kesimpulan

Dari hasil dan pembahasan penelitian yang telah dilakukan dapat diambil kesimpulan sebagai berikut :

1. Penambahan ion logam $Fe^{2+}$ dan ion $NH_4^+$ pada rentang konsentrasi 1mM – 100 mM tidak memberikan pengaruh terhadap aktivitas ekstrak kasar enzim selulase dari isolat *Bacillus subtilis* strain SF01.
2. Penambahan ion logam $Zn^{2+}$ dan $Cu^{2+}$ menurunkan aktivitas ekstrak kasar enzim selulase dari isolat *Bacillus subtilis* strain SF01 mulai pada konsentrasi 5 mM – 100 mM.

## 5.2. Saran

Dari hasil pembahasan penelitian yang telah dilakukan disarankan :

1. Penggunaan bahan-bahan yang mengandung ion logam $Zn^{2+}$ dan $Cu^{2+}$ dalam purifikasi atau aplikasi enzim selulase asal *Bacillus subtilis* strain SF01 sebaiknya dihindari, karena dapat menurunkan aktivitas enzim. Apabila tidak dapat dihindari, maka penggunaannya disarankan dengan konsentrasi kurang dari 1mM.
2. Dilakukan tahapan pemurnian enzim selulase asal *Bacillus subilis* strain SF01 lebih lanjut.

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